Marc A. Downing

Consulting Petroleum Geologist

Geologic Report

Drilling Time and Sample Log

Operator **Double D's, LLC**

Lease **Cecil** No. **1**

API # **15-051-26908-0000**

Field **Wildcat**

Location **1096' FNL & 1818' FWL**

Sec. **30** Twp. **15s** Rge. **18w**

County **Ellis** State **Kansas**

Elevation

KB **1966**
DF
GL **1956**

Casing Record

Surface
8 5/8" @ 1141'
Production
5 1/2" @ 3667

Electrical Surveys

CNDL / DIL
MEL / Sonic

Formation	Sample tops	Log Tops	Datum	Struct Comp
Top Anhydrite	1131	1132	+834	+11
Base Anhydrite	1169	1169	+797	+7
Topeka	2943	2941	-975	+3
Heebner	3209	3208	-1242	+5
Toronto	3228	3227	-1261	+4
LKC	3254	3254	-1288	+4
BKC	3497	3496	-1530	+4
Gorham Sand	3557	3556	-1590	Absent
Arbuckle	3566	3566	-1600	+25
Total Depth	3669	3668	-1702	

Reference Well For Structural Comparison **Aaron Oil - Bieker #1-25**

980' FNL & 330' FEL_____Sec. 25-15s-19w

Drilling Contractor	**Southwind Drilling, Rig #1**		
Commenced	**4-24-18**	Completed	
Samples Saved From	**2950**	To	**RTD**
Drilling Time Kept From	**2850**	To	**RTD**
Samples Examined From	**2950**	To	**RTD**
Geological Supervision From	**2950**	To	**RTD**

Summary and Recommendations

Due to structural position, DST Recovery, and log evaluation, it was de
to set 5 1/2" production casing for completion.

Perforations:

Arbuckle:	**3568-3572**
Gorham Sand:	**3556-3560**
LKC "C":	**3276-3283**
LKC "F":	**3333-3335 (Before Abandonment)**
LKC "E":	**3321-3327 (Before Abandonment)**
LKC "A":	**3254-3257 (Before Abandonment)**

Respectfully Submitted,

Marc A. Downing

cided

ROCK TYPES

- 🟥 Dolprim
- ▤ Lmst fw7>
- ▬ shale, gry
- ▬ Carbon Sh
- 🟨 Ss

ACCESSORIES

FOSSIL
- ◊ Oolite

STRINGER
- ⋯ Sandstone
- ▬ red shale
- ═ carb shale

OTHER SYMBOLS

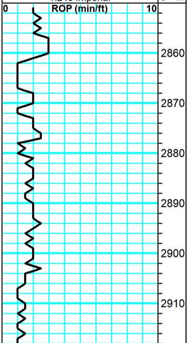
OIL SHOWS
- ● Even Stn
- ◕ Spotted Stn 50 - 75 %
- ◑ Spotted Stn 25 - 50 %
- ◔ Spotted Stn 1 - 25 %
- ○ Questionable Stn
- D Dead Oil Stn
- ■ Fluorescence

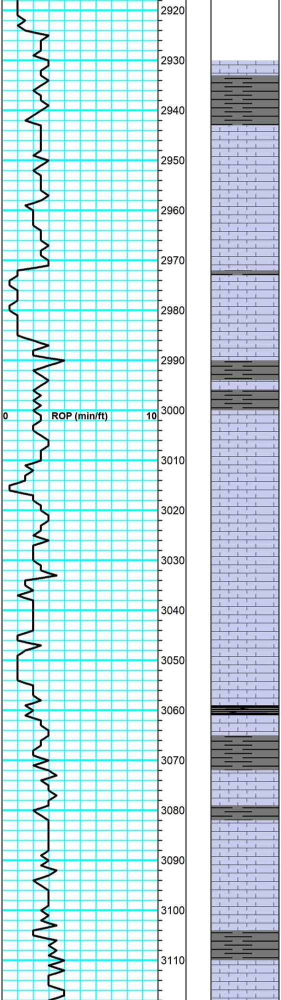
MISC
- Daily Report
- Digital Photo
- Document
- Folder
- Link
- Vertical Log File
- Horizontal Log File
- Core Log File
- Drill Cuttings Rpt

DST
- ■ DST Int
- ■ DST alt
- ■ Core
- ‖ tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #1 ROP (min/ft) ▬ 1:240 Imperial	Cored Interval Depth | Intervals DST Interval	DST	Lithology	Oil Shows	Geological Descriptions	Comment





Sh: gry

Topeka 2943 (-977)

LS: wht-tan-brn. Moslty fn xln, some md xln, foss in prt. Mostly pr por and dns, all NS.

LS: tan-brn, md xln, foss. Scat sub xln-chlky rx, rest dns w/ pr por. NS.

Sh: gry

LS: wht-tan, fn xln. Some fn suc xln w/ gd int xln por, mostly v chlky. All totally barren, no od.

Sh: gry

Sh: gry

LS: tan, fn xln. V dns w/ no vis por, few foss.

LS: tan-wht, scat vugs, mostly chlky, NS.

LS: tan, md xln, foss, mtld in prt. Pr por and dns, all NS.

LS: tan-wht, scat lrg foss. Few rx w/ vug por, mostly sub xln-chlky. All totally barren, no od.

LS: mostly ala.

Sh: Black Carb

Sh: gry w/ brn

LS: wht, vfn-mic xln. V dns w/ no vis por, all totally barren and no od.

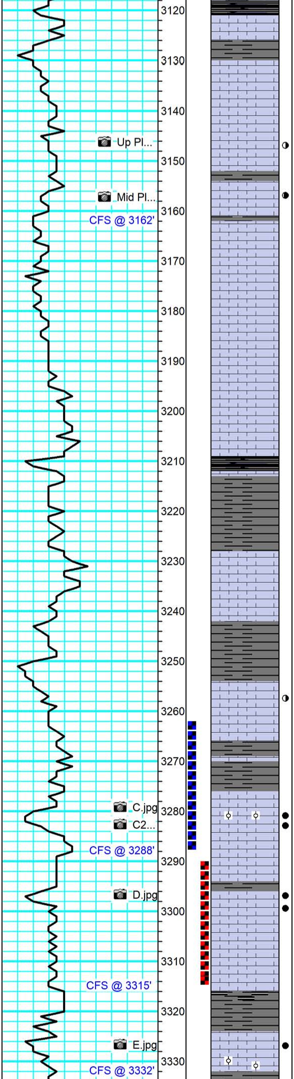
Sh: gry

LS: much ala, v fn xln wht. Pr por w/ NS, scat chlky rx.

LS: ala

Sh: gry

LS: tan-wht, fn-md xln, pr por.



Sh: Black Carb

Sh: gry

LS: wht-tan, md xln, chlky in prt, mostly pr por and dns w/ NS, no od.

LS: wht-tan, md xln, foss. Fr amt sub xln-chlky rx, scat fr vug por, fr lt brn sat stn, sptd SFO. 2-3 pcs selenite w/ fr stn and sptd SFO. Fr od.

LS: wht, fn-vfn xln, scat fr vug por, fr-gd sat stn, sptd SFO. Scat selenite ala w/ better show. Fr od.

LS: wht-lt tan, fn-md xln. Fr amt foss, many subxln-chlky rx. All NS, no od.

LS: mostly ala, scat chlky rx, foss, md xln. Trng dns w/ no vis por. All NS.

LS: ala, dns

Heebner 3209 (-1243)

Sh: Black Carb

Sh: lt gry

Toronto 3228 (-1262)

LS: wht, fn-vfn xln. Mostly pr por, sub xln in prt. All totally barren, no od.

Sh: grn-lt grn

LKC 3254 (-1288)

LS: tan-brn, fn xln. Scat fr pp por w/ fr-gd sat stn, sptd SFO when broken, fnt od. Rx fairly tight.

Sh: drk gry

Sh: gry

LS: wht, ool. Gd ooc por, fr-gd sat brn stn, gd SFO, sltly gssy when broken, trng hvy blk stn in por. 60' cfs sltly dolomitic, fn-md xln, totally sat brn, SFO when broken. Fr-gd od.

Sh: gry

LS: wht, md xln frag foss w/ few ool. Sltly dolom, scat selenite xls. Gd int foss and vug por, gd lt brn sat stn w/ gd SFO, gd strong od.

Sh: drk gry

LS: wht, md xln, dolomitic, scat frag foss. 3-4 rx w/ fr-gd vug por, fr-gd sat stn, gd SFO, lt-fr od. Fr amt barren chlky rx. Trng tot ool, dns and NS.

Vis: 47 Wt: 9.0

DST #1
3262-3288
15-30-45-60
I.F. - BOB 1 min / no SIB
F.F. - BOB 1 min, GTS in 40 min. / 3" SIB

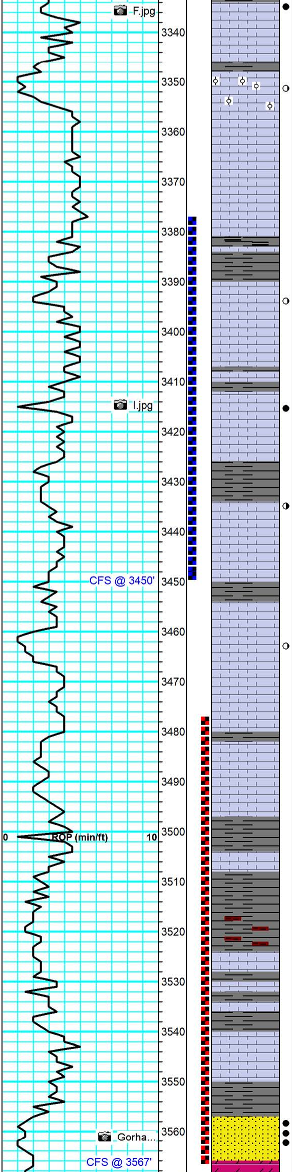
IFP:	39-52
FFP:	66-124
SIP:	513-510
HP:	1605-1591

Rec:
GTS - TSTM
315' GO (90% oil)
BHT: 108 G = 37

DST #2
3290-3315
15-30-45-60
I.F. - BOB 3 min / 1/2" SIB
F.F. - GTS on open, BOB 8 min / weak surf SIB, died in 20 min

IFP:	41-141
FFP:	152-321
SIP:	509-501
HP:	1633-1550

Rec:
GTS - TSTM
693' OSGW (5%g, 95%w)
BHT: 110 Chlor: 67K



LS: wht, tot foss, frag. Scat gd inf foss and vug por, gd lt brn sat stn, gd SFO, gd od. Fr amt subxln-chlky rx w/ NS.

LS: wht, fn xln. Fr-gd ooc por w/ sub xln mtx. Mostly barren, 1-2 rx w/ stn and spttd SFO. No od.

LS: wht-tan, fn-md xln. Pr por and dns, all NS, and no od.

Sh: drk gry w/ blk

Sh: gry

Vis: 45 Wt: 9.3
DST #3
3377-3450
45-45-60-60
I.F. - 11"
F.F. - 5"
IFP: 15-69
FFP: 71-128
SIP: 589-581
HP: 1669-1600
Rec:
221' OSMW (80% w)
BHT: 108 Chlor: 77K

LS: wht, fn-md xln. Scat rx w/ pr-fr stn and spttd SFO in fr int xln por, sub xln mtx. Lt od.

Sh: gry

LS: wht, tot foss/ool, frag. 4-5 rx w/ gd int foss and vug por, gd lt brn sat stn, gd SFO, fr-gd od.

Sh: gry

LS: wht, md xln. Few rx w/ pr-fr ooc por, pr stn, SFO when broken. Scat dolomitc rx w/ fr stn and SFO, lt od. Fr amt sub xln rx.

LS: wht, md xln, dolomitic w/ scat frag foss. Gd int xln and vug por, fr amt sub xln. 1-2 rx w/ pr-fr stn and spttd SFO, rest totally barren. Fnt od.

Sh: gry

LS: wht, fn xln, dns

BKC 3497 (-1531)

Sh: gry

LS: ala, pr por

Sh: brn

Sh: brn w/ some red

Vis: 45 Wt: 9.0
DST #4
3477-3567
30-30-30-30
I.F. - Tool slid 7', 1" blow
F.F. - Dead, flush, surf
IFP: 102-111
FFP: 112-112
SIP: 1058-1035
HP: 1803-1807
Rec:
5' oil
214' oily mud (5% o)
BHT: 107

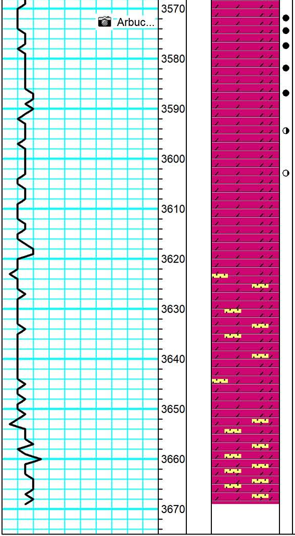
Sh: ala w/ tan LS

LS: wht-tan, fn xln. Pr por and dns, NS.

Sh: gry

Gorham Sand 3557 (-1591)

SS: clr-wht clust, fn-md grain, fr rnd, well sort, mostly clean, 1-2 clust w/ small pcs wht cht. Fr-gd int gran por, mostly friable, few tight clusters w/ depth. Gd-vgd sat, few pcs totally sat, v gd SFO, gd strong od.



Arbuckle 3566 (-1600)

Dolo: tan, fn-md rhom xln. Gd int xln por w/ scat sml vugs. Gd sat stn w/ gd SFO, gd strong od.

Dolo: tan-wht, fn-md rhom xln. Much ala, gd int xln por w/ scat vugs. Gd sat stn w/ gd SFO, gd strong od.
Dolo: wht, fn-md rhom xln. Less por, scat tight rx. Scat fr sat stn w/ SFO, many barren rx. Some trng v hvy w/ scat gilsonite stn. Still gd od. Scat tan cht.

Dolo: wht, fn rhom xln. Fr-gd int xln and vug por. Much ala, scat fr show w/ many barren rx. Less gilsonite, fr od.

Dolo: md rhom xln, gd intxln and vug por. Mostly barren, few rx w/ fr stn, hvy in prt. Scat SS and sndy dolo, gd por, totally barren. Still fr od.

Much SS, clr-wht clust. Md-crs grain, well rnd, fr-well sort. Scat gd int gran por, fr amt tight. Fr amt wht dolo, fn-md suc xln, scat sml rhombs. Fr int xln por, totally barren, lt od.

RTD: 3669 (-1703)